

WHAT IS CLAIMED IS:

1. A jointer for connecting two rod members, said jointer comprising:
a male connector for fastening to an end of one of the two rod members;
5 a female connector connectable to said male connector for fastening to an
end of the other rod member;

wherein said female connector includes a longitudinally extended receiving
chamber having an opening, and a retaining element protruded into said receiving
chamber;

10 wherein said male connector includes a plug member having a free end and
being insertable through said opening into said receiving chamber of said female
connector, a guiding groove longitudinally extended from said free end of the plug
member for accommodating said retaining element upon insertion of said plug member
into said receiving chamber, and a transverse locating groove extended from a bottom
15 end of said longitudinal guiding groove for receiving said retaining element upon
rotation of said female connector relative to said male connector after insertion of said
plug member into said receiving chamber of said female connector;

wherein said transverse locating groove has a start point integrally connected
to the bottom end of said longitudinal guiding groove, and an end point;

20 wherein said transverse locating groove has a width made gradually smaller
from the start point toward the end point thereof, and the end point of said transverse
locating groove has a width smaller lightly than that of said retaining element.

2. The jointer as claimed in claim 1, wherein said female connector
25 comprises a cylindrical connector body defining said receiving chamber therein and

having a transverse through hole, which has a spherical peripheral wall, in which said retaining element is mounted such that said retaining element peripherally partially protrudes into said receiving chamber, and an end cap capped on an end of said connector body and covered over said transverse through hole to hold down said
5 retaining element in said transverse through hole.

3. The jointer as claimed in claim 1, wherein said transverse locating groove further comprises a recessed retaining portion integrally connected to the end point thereof for receiving said retaining element, said recessed retaining portion having a
10 depth and width relatively greater than the other part of said transverse locating groove.

4. The jointer as claimed in claim 1, wherein said retaining element has a sphere partially projecting into said receiving chamber of said female connector.
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5. The jointer as claimed in claim 1, wherein said female connector comprises an annular receiving portion disposed in a bottom end thereof around the opening of said receiving chamber; said male connector comprises a mounting member axially extended from said plug member and having a flange connectable to said
20 annular receiving portion of said female connector upon insertion of said plug member into said receiving chamber of said female connector.

6. The jointer as claimed in claim 1, wherein said female connector comprises a thread extended around an outer periphery thereof for fastening to said one
25 of the two rod members; said male connector comprises a mounting member axially

extended from said plug member and having a thread extended around an outer periphery thereof for fastening to said end of the other rod member.

5 7. The jointer as claimed in claim 1, wherein said female connector comprises two said retaining elements symmetrically disposed in said receiving chamber of said female connector at tow sides; said male connector comprises two said longitudinal guiding grooves symmetrically formed on said plug member of said male connector at two sides.

10 8. The jointer as claimed in claim 1, wherein said female connector comprises three said retaining elements equiangularly spaced in said receiving chamber of said female connector; said male connector comprises three said longitudinal guiding grooves equiangularly formed on said plug member of said male connector.

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 9. A jointer for connecting two rod members, said jointer comprising:
 a male connector for fastening to an end of one of the two rod members;
 a female connector connectable to said male connector for fastening to an end of the other rod member;

20 wherein said female connector includes a longitudinally extended receiving chamber having an opening, and a traverse through hole, which is communicated with said receiving chamber, in which a retaining element and a spring member are received, said retaining element being supported on said spring member and partially protruded into said receiving chamber;

25 wherein said male connector includes a plug member having a free end and

being insertable through said opening into said receiving chamber of said female connector, a guiding groove longitudinally extended from said free end of the plug member for accommodating said retaining element upon insertion of said plug member into said receiving chamber, and a transverse locating groove extended from a bottom
5 end of said longitudinal guiding groove for receiving said retaining element upon rotation of said female connector relative to said male connector after insertion of said plug member into said receiving chamber of said female connector;

wherein said transverse locating groove has a start point integrally connected to the bottom end of said longitudinal guiding groove, and an end point that has a
10 depth deeper than the other part of said transverse locating groove.

10. The jointer as claimed in claim 9, wherein said spring member is a compression spring.